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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,628	06/01/2001	Cecil Yip	P04885US1	3027

7590 11/17/2006  
Heidi S Nebel  
801 Grand Avenue Suite 3200  
Des Moines, IA 50309-2721

EXAMINER

CLOW, LORI A

ART UNIT PAPER NUMBER

1631

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

*Supplemental*  
**Notice of Allowability**

Application No.

09/744,628

Examiner

Lori A. Clow, Ph.D.

Applicant(s)

YIP ET AL.

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 7/11/06 and phone interview on 11/1/06.
2. ☒ The allowed claim(s) is/are 3,6,9,11,13,15 and 20-24.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application   |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>11/06</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                                       |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                      |
|  | 9. <input type="checkbox"/> Other _____.  |

### **SUPPLEMENTAL EXAMINER'S AMENDMENT**

This amendment is Supplemental to and takes the place of the Examiner's Amendment of 11 October 2006.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee. It is noted that the time period for response and paying the issue fee is reset to begin with the mailing of this Office Action.

Authorization for this examiner's amendment was given in a telephone interview with Janae Lehman Bell on 29 September 2006.

The application has been amended as follows:

Please amend the claims according to the following:

In claim 3, line 2, replace "comparing using a processor all or part of the structure" with --comparing all or part of the structure--.

In claim 3, line 3, replace "structure of insulin receptor" with --structure of **an** insulin receptor--.

In claim 3, line 5, replace "a computer program on the processor" with --a computer program on **a** processor--.

In claim 3, line 7, replace "monomer B in Table 1, the" with --monomer B in Table 1, **wherein** the--.

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In claim 3, line 8, replace “ligand binding site defined” with --ligand binding site **is** defined--.

In claim 3, line 10, replace “the program displaying” with --**said** program displaying--.

In claim 3, line 16, replace “compound modulates insulin receptor activity by determining if the compound agonizes” with --compound modulates **the** insulin receptor activity by determining if the compound agonizes **the** --.

In claim 6, line 2, replace “structure of insulin receptor” with --structure of **the** insulin receptor--.

In claim 9, line 2, replace “comparing using a processor all or part of the structure” with --comparing all or part of the structure--.

In claim 9, line 3, replace “structure of insulin receptor” with --structure of **an** insulin receptor--.

In claim 9, line 5, replace “a computer program on the processor” with --a computer program on **a** processor--.

In claim 9, line 7, replace “monomer B in Table 1, the” with --monomer B in Table 1, **wherein** the--.

In claim 9, line 8, replace “ligand binding site defined” with --ligand binding site **is** defined--.

In claim 9, line 10, replace “the program displaying” with --**said** program displaying--.

In claim 9, line 16, replace “compound modulates insulin receptor activity by determining whether the compound antagonizes” with --compound modulates **the** insulin receptor activity by determining whether the compound antagonizes **the** --.

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In claim 11, line 2, replace “comparing using a processor all or part of the structure” with --comparing all or part of the structure--.

In claim 11, line 3, replace “structure of insulin receptor” with --structure of **an** insulin receptor--.

In claim 11, line 5, replace “a computer program on the processor” with --a computer program on **a** processor--.

In claim 11, line 6, replace “at least one residue from” with --at least one **first** residue from--.

In claim 11, line 7, replace “at least one residue from” with --at least one **second** residue from--.

In claim 11, line 8, replace “the program displaying” with --**said** program displaying--.

In claim 11, line 9, replace “including the residues” with --including **the first and second** residues--.

In claim 11, line 11, replace “residue and determining whether the compound interacts with the residues” with --**first and second** residues and determining whether the compound interacts with **said first and second** residues--.

In claim 11, line 12, replace “between the residues” with --between **said first and second** residues--.

In claim 11, line 13, replace “compound modulates insulin receptor” with --compound modulates **the** insulin receptor--.

In claim 11, line 14, replace “agonizes insulin receptor” with --agonizes **the** insulin receptor--.

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In claim 13, line 2, replace “comparing using a processor all or part of the structure” with --comparing all or part of the structure--.

In claim 13, line 3, replace “structure of insulin receptor” with --structure of **an** insulin receptor--.

In claim 13, line 5, replace “a computer program on the processor” with --a computer program on **a** processor--.

In claim 13, line 6, replace “at least one residue from” with --at least one **first** residue from--.

In claim 13, line 7, replace “at least one residue from” with --at least one **second** residue from--.

In claim 13, line 8, replace “the program displaying” with --**said** program displaying--.

In claim 13, line 9, replace “including the residues” with --including **the first and second** residues--.

In claim 13, line 11, replace “residue and determining whether the compound interacts with the residues” with --**first and second** residues and determining whether the compound interacts with **said first and second** residues--.

In claim 13, line 12, replace “between the residues” with --between **said first and second** residues--.

In claim 13, line 13, replace “compound modulates insulin receptor” with --compound modulates **the** insulin receptor--.

In claim 13, line 14, replace “antagonizes insulin receptor” with --agonizes **the** insulin receptor--.

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In claim 23, line 1, replace "at least one residue" with --at least one **first** residue--.

In claim 24, line 1, replace "at least one residue" with --at least one **first** residue--.

### **Reasons for Allowance**

The following is an examiner's statement of reasons for allowance: The prior art does not teach or fairly suggest a method of determining whether a compound modulates insulin receptor activity by comparing all or part of the structure of the compound to all or part of the fitted quaternary structure of an insulin receptor using the structural coordinates recited in claims 3, 9, 11, and 13.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Inquiries**

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The Central Fax Center Number is (571) 273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lori A. Clow, Ph.D., whose telephone number is (571) 272-0715. The examiner can normally be reached on Monday-Friday from 10 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on (571) 272-0811.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the

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USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

November 8, 2006  
Lori A. Clow, Ph.D.  
Art Unit 1631

*Lori A. Clow*

**MARJORIE A. MORAN**  
**PRIMARY EXAMINER**

*Marjorie A. Moran*  
11/7/06